

Application No. 10/646,008
Response dated: June 5, 2006
Reply to Final Office Action dated: March 6, 2006

Amendment to the Drawings

Please replace Figure 3 with the two (2) clean replacement sheets provided herewith. No new matter has been added.

REMARKS

In response to the Office Action dated March 6, 2006, Applicant respectfully requests reconsideration based on the above claim amendments and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 1-25 are pending in the present Application. Claims 1, 7, 9 and 14 have been amended and Claims 6, 11, 12, 16, 17 and 23-25 have been cancelled leaving Claims 1-5, 7-10, 13-15 and 18-22 for consideration upon entry of the present amendments and following remarks.

Support for the claim amendments can at least be found in the specification, the figures, and the claims as originally filed. Particularly, support for amended Claims 1, 7 and 9 is at least found in originally filed Claims 11 and 12, now cancelled.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Drawings and Specification

The drawings are objected to under 37 CFR 1.83(a) as allegedly not showing every feature of the invention specified in the claims. The Examiner alleges that Claim 4 : “the data driving IC mounted on the liquid crystal panel” as not being shown in the drawings.

In reply, Applicants hereby submit corrected drawing sheets in compliance with 37 C.F.R. 1.121(d) of FIG. 3B to illustrate the data driving IC 540 mounted on the liquid crystal panel 300. FIG. 3A is the same as originally filed FIG. 3. The amended drawing sheets include all of the figures appearing on the immediate prior version of the sheet. The replacement sheets are labeled “Replacement Sheet” in the page header (as per 37 C.F.R. §1.84(c)).

No new matter has been introduced by new Figure 3B as support is found throughout the specification, the figures, and the claims as originally filed. Particularly, support for Figure 3B is at least found in originally filed Claim 4 and in the specification at page 12, line 26 to page 13, line 6. The Specification is amended accordingly to reflect FIGS. 3A and 3B and to correct inadvertent typographical errors. Consideration and entry of new Figures 3A and 3B are respectfully requested.

Regarding the Drawings and the Specification, the Examiner also alleges that Claim 9: “a plurality of second connecting lines disposed between the second driving signal wire and at least another part of the first display signal wire, and connected to at least one of the second driving signal wire and the another part of the first display signal wire” is not shown in the drawings.

The Examiner further alleges that FIG. 6 of the elected species does not show the underlined feature of Claim 9. (See, Page 4 of the Office Action.) Applicant respectfully traverses.

Claim 9 depends from Claim 7. Amended Claims 7 and 9 recite, *inter alia*,

“The liquid crystal display device of claim 1, further comprising:

a second driving signal wire transmitting driving signals for the first display signal lines, wherein the second driving signal wire is separated from the first and second display signal wires, the switching elements, and the pixel electrodes, and includes a second pad connected thereto at its near end, and

a plurality of second connecting lines disposed between the second driving signal wire and at least another part of the first display signal wire, and connected to at least one of the second driving signal wire,

wherein the second connecting lines are electrically disconnected from the another part of the first display signal wire.” [Emphasis added.]

In a non-limiting embodiment as illustrated in FIG. 6, the left gate driving signal line 132 may be considered the first driving signal wire, the right gate driving signal line 132 may be considered the second driving signal wire, the longer connecting member 94 may be considered the first connecting line and the shorter connecting member (above the longer one) 94 may be considered the second connecting lines. Both the first driving signal wire 132 (of Claim 1) and second driving signal wire 132 (of Claims 7 and 9) include first connecting lines (e.g. longer 94) and second connecting lines (shorter 94), respectively, the first and second connecting lines being disposed between the first and second driving wires 132 and first display signal lines of the first display signal wire.

First display signal lines may be considered as gate lines 121 illustrated in FIG. 6, where a plurality of the first display signal lines are included in the first display signal wire of Claim 1. *A part* of first display signal wire (of Claim 1) may be considered as the first display signal lines connected to the longer 94/gate line 121 and *another part* of the first display signal wire (of Claims 7 and 9) may be considered as the first display lines connected to the shorter 94/gate line 121 in FIG. 6. As noted above, Claims 1 and 7 are amended to now comprise both the first and

second driving signal wires transmitting driving signal for the *first signal display lines* having the plurality of the first display signal lines.

Therefore, Applicants respectfully submit that a plurality of second connecting lines disposed between the second driving signal wire and at least another part of the first display signal wire, and connected to at least one of the second driving signal wire, wherein the second connecting lines are electrically disconnected from the another part of the first display signal wire of Claim 9 is shown at least in FIG. 6.

Another non-limiting embodiment illustrated in FIG. 3 also shows the limitations discussed above for Claims 9, 7 and 1, with gate driving signal lines 321 considered the first driving signal wire (of Claim 1) and gate driving signal line 322 considered second driving wire (of Claims 7 and 9). First and second connecting lines (of Claims 1, 7 and 9) include connecting members 94 and 122, member 94 being connected to the driving signal line (321 and 322) on one end and being connected to the portion 122 at the other end. (See, FIG. 6 illustrating an enlarged area of FIG. 3.) The member 94 is disposed between the driving signal line 322 (second driving signal wire) and display lines. First display lines may be considered as the various horizontal (gate) lines in FIG. 3. Therefore, Applicant respectfully submits that the limitations of Claim 9 are further supported in FIG 3.

Accordingly, Applicant submits that the drawings are now in compliance with 37 CFR 1.83(a) and therefore respectfully requests reconsideration and withdrawal of this objection.

Claim Rejections Under 35 U.S.C. §102

Claims 1–5, 7–15 and 18–22 are rejected under 35 U.S.C. 102(b) as being anticipated by Imajo et al., U.S. Patent Publication No. 2001/0015709 (hereinafter “Imajo”). Applicant respectfully traverses. Claims 11 and 12 are hereinabove cancelled and rejections are rendered moot for these claims.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant has amended Claim 1 to recite, *inter alia*,

“a first driving signal wire transmitting driving signals for the first display signal lines, wherein the first driving signal wire is separated from the first and second display signal wires, the switching elements, and the pixel electrodes, and includes a first pad connected thereto at its near; end

a plurality of first connecting lines disposed between the first driving signal wire and a part of the first display signal wire, and connected to at least one of the first driving signal wire

wherein the first connecting lines are electrically disconnected from the part of the first display signal wire.”

In the Office Action, the wirings OUT in Figs. 28 of Imajo are considered as first connecting lines on drain lines side and are also alleged to be shown in Fig. 34 of Imajo. Applicant also notes that in Figs. 26 and 27 of the Attachment to the Office Action, “connecting wire” is indicated as a portion of the drain lines DL as allegedly teaching “connecting portions,” and the remaining parts of the drain lines on either sides of the “connecting portions” as “the driving signal wire” and “the display signal lines” of the claimed invention. Applicant respectfully disagrees.

The driving signal wire, display signal lines and connecting wire as indicated in Figs. 26-28 are all the same feature, or essentially one date line. That is, the portions of the data line (DL) of Imajo allegedly teaching the “driving signal wire” and “the display signal lines” of the claimed invention cannot be considered as separate from each other. Therefore, Imajo does not disclose a first driving signal wire transmitting driving signals for the first display signal lines, wherein the first driving signal wire is separated from the first and second display signal wires of Claim 1.

Additionally, for the purposes of this response, if Imajo is considered as teaching the connecting portions, the driving signal wire and the display signal lines as indicated in Figs. 26-28, the connecting portion is clearly not electrically disconnected from the display signal lines. In fact, they form one single data line (DL). Therefore, Imajo does not disclose the first connecting lines are electrically disconnected from the part of the first display signal wire of amended Claim 1.

Thus, Imajo fails to teach all of the limitations of amended Claim 1. Claim 1 is not further rejected or objected and is therefore allowable. Claims 2-5, 7-10, 13-15 and 18-22 variously depend from Claim 1 and are correspondingly allowable. Reconsideration and allowance of Claims 1-5, 7-10, 13-15 and 18-22 are respectfully requested.

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Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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